What is claimed is:

1. A method for detecting microorganisms, comprising the steps of:

(a) exposing a collection device bearing a dry growth medium to a microorganism-containing environment for a predetermined period of time;

(b) adding a premeasured volume of activating liquid to the dry growth medium; and

(c) allowing collected microorganisms to grow into colonies.

2. The method of claim 1 wherein the steps are in the sequence set forth: (a), (b), and (c).

3. The method of claim 2 wherein the method further comprises after step (b) and before step (c) the step of spreading the activating liquid over a predefined area of the medium with a hand press by placing the hand press over the liquid on the medium and applying sufficient pressure to spread the liquid over the predefined area of the medium.

4. The method of claim 1 wherein the device comprises a substrate having an upper surface and a layer of a dry growth medium disposed on the upper surface of the substrate.

5. The method of claim 1 wherein the device comprises:

a self-supporting, water-proof substrate having an upper surface, a layer of adhesive coated on the upper surface of the substrate, the adhesive being non-inhibitory to the growth of

microorganisms, and cold-water-soluble powder adhered uniformly to the adhesive, the powder comprising one or more nutrients for growing microorganisms, and optionally a gelling agent.

6. The method of claim 4 wherein the device further comprises a cover sheet releasably adhered to at least a portion of the substrate the cover sheet being opened in step (a) to expose the dry growth medium to ambient air and closed in step (c) to allow collected microorganisms to grow.

7. The method of claim 4 wherein the adhesive layer is translucent to allow the colonies to be visually inspected.

8. The method of claim 1 wherein said device comprises:

a self-supporting, water-proof substrate having an upper surface;

an air-permeable membrane having its peripheral edge(s) substantially uncovered, and having a top surface and a bottom surface, the bottom surface being fixed to and covering at least a portion of the upper surface of the substrate; and

a dry growth medium fixed to and covering at least a portion of the top surface of the membrane comprising one or more nutrients for growing microorganisms, and optionally a gelling agent.

9. The method of claim 2 wherein the method further comprises an additional step

between steps (b) and (c) of placing the device in an incubator.

10. The method of claim 4 wherein the powder comprises a gelling agent capable of forming a gel having a Brookfield viscosity of at least 1500 cps when hydrated with a premeasured volume of water.

11. The method of claim 2 wherein the method further comprises an additional step after step (c) of counting the colonies.

12. A kit for detecting microorganisms comprising:

(a) a dry collection device for collecting microorganisms having a substrate with an upper surface and a layer of dry growth medium disposed on the upper surface of the substrate; and

(b) a premeasured volume of liquid to hydrate the dry growth medium after the microorganisms have been collected thereon.

13. The kit of claim 12 wherein said dry collection device further comprises a layer of adhesive coated on the upper surface of the substrate underlying the layer of dry growth medium.

14. The kit of claim 12 wherein said dry collection device further comprises a cover sheet releasably adhered to at least a portion of the substrate.

15. The kit of claim 14 wherein the cover sheet has disposed thereon adhesives, growth media, dyes, antibiotics or combinations and mixtures thereof.

16. The kit of Claim 13 wherein the adhesive is translucent to allow the colonies to be visually inspected.

17. The kit of 12 wherein said dry collection device further comprises an air-permeable membrane, having its peripheral edge(s) substantially uncovered, and having a top surface and a bottom surface, the bottom surface being fixed to and covering at least a portion of the top surface of the substrate; and a dry growth medium fixed to and covering at least a portion of the top surface of the membrane comprising one or more nutrients for growing microorganisms, and optionally a gelling agent.

18. The kit of 12 wherein said kit further comprises a hand press having a pressing surface and a raised ring disposed on the pressing surface defining a predetermined area.